

Offshore

Work Order ID 153877***153877***

Page 1

Friday, November 25, 2016 2:07:31 PM

Item ID: D206-642-541

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/23/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: DAS 21 9-89 Date: NOV 28 2016

Tooling:

Date:

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3274-041

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

0.00

Memo

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D206-642-541 CHG005

N/A

Work Order ID 153877

Friday, November 25, 2016 2:07:31 PM

153877

Page 2

Item ID: D206-642-541**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Stop *NS2*****Item Name:** Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.**Start Date:** 12/13/2016 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 12/23/2016 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start *NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

0.00

110

Skidtubes

0.13

Skidtubes

Memo

****VERIFY AND INSPECT THE MATERIAL PRIOR TO USE****

1- remove fwd indexing ridge as per dwg D3274. Prepare for welding

2- weld fwd cap as per dwg D3274 and OSI004

AR Aluminum Rod Batch: M131262/M133750

3- grind fwd cap weld on top surface only

4- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

5-Drill Aft cap pilot hole using DT8025

6 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D and DT8742. Drill 3/16" pilot holes as per Dwg D3274

7 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

8 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

16-12-1 JK

7 DEC 16-12-05

16-12-5 JK

Friday, November 25, 2016 2:07:31 PM

Page 3

Hand Finishing

JAS
38
9-89

DEC 05 2016



Work Order ID 153877

Friday, November 25, 2016 2:07:31 PM

153877

Page 4

Item ID: D206-642-541 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
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Start Date: 12/13/2016 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 12/23/2016 Req'd Qty: 1.00 *1* Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC7-Inspect Chemical Conversion Coat	0.00							
130									
QC	Memo	0.00							
Quality Control									
150		0.00							
150	Skidtubes								
Skidtubes	Memo	0.14							
Skidtubes	1-Open Ø0.313" and 0.375" crossbolt spacer holes as per Dwg D3274								
	2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube								
	3-Bond web in place as per Dwg D3274 & QSI 015.								
	A/RSikaflex-291 <u>136893</u>								
	Sikaflex expire date: <u>17-2-16</u>								
	Start: _____ Time: <u>11:40</u>								
	Finish: _____ Time: _____								
	(Adhere for 12 hours)								

16-12-7 JH

DAS 18 9-89

Work Order ID 153877

Friday, November 25, 2016 2:07:31 PM

153877

Page 5

Item ID: D206-642-541 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
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Start Date: 12/13/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 12/23/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

QC5- Inspect part completeness to step on W/O

0.00

160

QC

Memo

0.00

Quality Control

DAS
03
9-88

16-12-8

170

Skidtubes

0.01

170

Skidtubes

Memo

0.12

Skidtubes

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2
OPEN HOLES TO .297" . Deburr3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD
END OF TUBE
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

16-12-8

PTC

16-12-13

DQA: Art Date: 2017-04-05

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: 6/11/17 Date: MAR 09 2017Work Order update only ☐

Work Order: <u>153877</u> Part No. <u>D206-642-541</u> NCR No. <u>17-6317</u>		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☒</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☒	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																							
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Date: <u>16-12-8</u>		Step #: <u>170</u>		QTY Effective: <u>1</u>		MRB (QSI042) Approval DAS 12 9-89 <u>16/12/16</u>																																									
Description Work Order Deviation <u>Aft Band 3.25"</u>				Disposition <u>Acceptable.</u> <u>Additional height lowers stress in tube due to drag load counter-acting float load.</u>																																											
				Completed By DAS 12 9-89 <u>16/12/16</u>																																											
				Lead hand / Supervisor Approval Verification <u>16-12-13</u>																																											
				QC / QA Coordinator Approval <u>17-03-08</u>																																											
Root Cause Environment ☐ No Re-verification ☐ Design ☐ Operator ☐ Doc/Data ☐ Offset/Setup ☐ Equip/Tooling ☐ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☐ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☐ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ ☒ Manufacturing Process Misidentified ☐ Past Due ☐		FAULT CATEGORY <table style="width:100%;"> <tr> <td>Pressure/Forced ☐</td> <td>Temperature/Cure ☐</td> <td>Power Loss/Surge ☐</td> <td>Positioned Wrong ☐</td> </tr> <tr> <td>☒ Bending</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> </tr> <tr> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> </tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	☒ Bending	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
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		OTHER :																																													

Friday, November 25, 2016 2:07:31 PM

Page 6

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 using DT10280 and deburr.

DP 16-12-19

Friday, November 25, 2016 2:07:31 PM

153877

Page 7

N900040100

Setup Start *NS1*

Stop *NS2*

Stop *NS2*

Start Date: 12/13/2016 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 12/23/2016 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

**Insp.
Stamp**

200

QC5- Inspect part completeness to step on W/O

0.00

200

QC

Memo

0.00

Quality Control

D 17.01.04

210

QC10- Inspect visual per QSI004- ground welds

0.00

210

QC

Memo

0.00

Quality Control

17.01.04

220

Pressure Wash per QSI005 4.3

0.00

220

HandFinish

Memo

0.10

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch

(x1) ~~0~~ 2017/01/06
BEB

Work Order ID 153877

Friday, November 25, 2016 2:07:31 PM

153877

Page 8

Item ID: D206-642-541**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Stop *NS2*****Item Name:** Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.**Start Date:** 12/13/2016 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 12/23/2016 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start *NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230		0.00							
230									
SprayPaint	Memo	0.22							
Spray Painting	Make sure Nut Plate Thread is protected using paint screw,.								
	1- PRIME AS PER DWG AND QSI 005 4.2								
	PRIMER PRC DESOTO 515X349 BATCH: <u>135929</u>								
	2- PAINT WHITE AS PER DWG AND QSI 005 4.2								
	PAINT BATCH: <u>136361</u>								
240	QC14- Inspect Spray Paint	0.00							
240									
QC	Memo	0.00							
Quality Control									
244	Wing Walk as per dwg QSI005 4.4 Batch <u>113620</u>	0.00							
244									
HandFinish	Memo	0.07							
Hand Finishing									

DAS
41
9-89
17-1-1412 d all 17/01/16 DAS
15
9-89

12 d all 17/01/17

Work Order ID 153877

Friday, November 25, 2016 2:07:31 PM

153877

Page 9

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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246

QC3- Inspect Part Finish

0.00

246

QC

Memo

0.00

Quality Control

DAS
38
9-89

JAN 17 2017

250

HandFinishing

0.00

250

HandFinish

Memo

0.15

Hand Finishing

1-Install Nut Plate as per Dwg D3274. Apply LPS-PROCYON to Nut Plate and rivets.

A/RN/ALPS-PROCYON M1336402-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a A/RSikaflex-291 M136093Sikaflex expire date: 17/091 x of 21 12/01/16

Work Order ID 153877

Friday, November 25, 2016 2:07:31 PM

153877

Page 10

Item ID: D206-642-541

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/23/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC5- Inspect part completeness to step on W/O	0.00							
260									
QC	Memo	0.00							
Quality Control	X Inspect Nut Plate & Inserts								1 of 1701-16 - 338
270	HAND FINISHING RESOURCE #1	0.00							
270									
HandFinish	Memo	0.18							
Hand Finishing	1-Install wearpads as per Dwg D3274.								
	2-Install ring as per Dwg D3274								
	A/RSikaflex-291 1136093								
	Sikaflex expire date: 17109								
	3-Inspect for foreign objects as per QSI 024								
	4-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.								
	A/RSikaflex-291 1136093								
	Sikaflex expire date: 17109								

Friday, November 25, 2016 2:07:31 PM

153877

Page 11

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 12/13/2016 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 12/23/2016 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

**Insp.
Stamp**

280

QC5- Inspect part completeness to step on W/O

0.00

280

OC

Memo

0.00

Quality Control

DAS
38
9-89
JAN 17 2017

290

Identify as per dwg & Stock Location: 0.00

0.00

290

Packaging

Memo

0.00

Packaging

Location : FG073

PPR147143 0.00

DAS
27
9-89

MAR 08 2017

300

QC21- Final Inspection - Work Order Release	0.00
---	------

0.00

300

QC

Memo

0.02

Quality Control

08-89
21
DAS

MAR 08 2017

Picklist Print

Friday, November 25, 2016 2:07:35 PM

Page 1

Work Order ID: 153877

153877

Parent Item: D206-642-541

D206-642-541

Parent Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016

Required Date: 12/23/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B05.09.23 Revised per D206-642 Rev. JKJ/JLM
IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM
IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD
IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC
IPP Rev:F 08-06-02 add comment DD verified by:EC
IPP Rev:G 08-10-09 revise details DD verified by:EC IPP
REV:H 13.09.05 CHG004/ ECN13-634 DD VERF:JLM IPP REV:I
14.04.28 AS PER ECN14-520 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D3274-041BENT

Manufactured No

110

Each

13.0000

1

1

D3274-041BENT

Skidtube Assembly 206

**

Location

Loc Qty

Loc Code

LG002

13

146839

3

150249

10

D4956-15

Manufactured No

270

Each

13.0000

1

1

D4956-15

Wearplate Fwd

**

Location

Loc Qty

Loc Code

FP002

13

138957

13

D4956-23

Manufactured No

270

Each

15.0000

1

1

D4956-23

Wearplate Center Fwd

**

Location

Loc Qty

Loc Code

FP002

15

145563

3

150588

4

151705

8

Picklist Print

Friday, November 25, 2016 2:07:35 PM

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Parent Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016

Required Date: 12/23/2016

Start Qty: 1.00

Required Qty: 1.00

D4956-35

Manufactured No

270 Each

16.0000

1

1

D4956-35

Wearplate Aft

**

11/17/16

LocationLoc QtyLoc Code

FP002

16

142432

10

152003

6

✓

D4956-39

Manufactured No

270 Each

20.0000

1

1

D4956-39

Wearplate Center Aft

**

11/17/16

LocationLoc QtyLoc Code

FP002

20

136887

1

141909

13

152002

6

✓

D3285-1

Manufactured No

110 Each

8.0000

1

1

D3285-1

Cap

**

BE16-12-02

LocationLoc QtyLoc Code

LG001

8

126290

8

✓

D3282-041

Manufactured No

150 Each

6.0000

1

1

D3282-041

Float Web (206L/407)

**

16-12-7

LocationLoc QtyLoc Code

LG002

6

147513

6

①

Picklist Print

Friday, November 25, 2016 2:07:35 PM

Page 3

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153877

Parent Item: D206-642-541

D206-642-541

Parent Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016

Required Date: 12/23/2016

Start Qty: 1.00

Required Qty: 1.00

D2649 Manufactured No 190 Each 141.0000 12 12

D2649

Cross Bolt Spacer

BE 16-12-15

Location

Loc Qty

Loc Code

LG001

141

146930

48

149833

93

12

D3275-1 Manufactured No 190 Each 81.0000 12 12

D3275-1

Cross Bolt Spacer

BE 16-12-15

Location

Loc Qty

Loc Code

LG001

81

146967

23

147604

19

149838

39

8

CR3212-4-03 Purchased No 250 Each 120.0000 2 2

CR3212-4-03

Cherry Rivet

all 12/10/16

Location

Loc Qty

Loc Code

CCK003

100

m134943

100

FP001

7

m126320

7

ST320

13

119017

13

x2

Picklist Print

Friday, November 25, 2016 2:07:35 PM

Page 4

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153877

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Start Date: 12/13/2016

Required Date: 12/23/2016

Start Qty: 1.00

Required Qty: 1.00

D3415-041 Manufactured No 250 Each 35.0000 1 1
D3415-041 ** all 12/16/16
Nut Plate

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	35	
121836	19	<u>x1</u>
147134	16	

CCR264SS3-3 CCR264SS-3-03 Purchased No 250 Each 109.0000 2 2
CCR264SS3-3 ** all 12/16/16
Cherry Rivet

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	109	
m128818	109	<u>x2</u>

ALS4-1032-130 AELS4-1032-130 Purchased No 250 Each 3,490.000 78 78
ALS4-1032-130 ** all 12/16/16
Rivnut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
CCK004	2364	
M135442	2364	
FG	50	FG
M135442	50	
FP001	938	
M133077	72	
M135442	866	
ST556	138	<u>x78</u>
M135442	138	

Picklist Print

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Page 5

Work Order ID: 153877

153877

Parent Item: D206-642-541

D206-642-541

Parent Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016

Required Date: 12/23/2016

Start Qty: 1.00

Required Qty: 1.00

D3537-3

Manufactured No

270

Each

33.0000

1

1

D3537-3

Wearpad

**

all 12/10/16

Location

Loc Qty

Loc Code

FG

8

86237

8

FP001

25

141921

25

D3537-1

Manufactured No

270

Each

113.0000

9

9

D3537-1

Wearpad

**

all 12/10/16

Location

Loc Qty

Loc Code

FG

11

79833

1

88562

10

FP001

101

141922

7

147593

8

150462

34

151518

52

ST184

1

125911

1

B153539

x7

B154016

x2

Picklist Print

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Page 6

Work Order ID: 153877

153877

Parent Item: D206-642-541

D206-642-541

Parent Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016

Required Date: 12/23/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

270

Each

4,094.000

80

80

NAS1149C0332R

WASHER

del 17/01/16

Location

Loc Qty

Loc Code

FP001

528

m135672

216

m135948

312

GA

86

m133284

86

ST260a

2500

m135466

1000

m136042

500

m136199

1000

ST266

980

m135408

280

m135766

500

m135908

200

M1136301

x80

NAS1149C0463R

Purchased

No

270

Each

198.0000

1

1

NAS1149C0463R

Washer

del 17/01/16

Location

Loc Qty

Loc Code

FP001

40

m127306

40

ST266

158

m134167

158

x1

Picklist Print

Friday, November 25, 2016 2:07:35 PM

Page 7

Work Order ID: 153877

153877

Parent Item: D206-642-541

D206-642-541

Parent Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016

Required Date: 12/23/2016

Start Qty: 1.00

Required Qty: 1.00

D3672-1

Manufactured No

270

Each

962.0000

2

2

D3672-1

Washer, Phenolic

lll 12/16/11

Location

Loc Qty

Loc Code

FG	10
85222	10
FP001	794
112218	4
<u>134785</u>	290
150074	500
ST049	158
147077	158

<i>x 2</i>

Picklist Print

Page 8

Friday, November 25, 2016 2:07:35 PM

Work Order ID: 153877

153877

Parent Item: D206-642-541

D206-642-541

Parent Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016

Required Date: 12/23/2016

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

270

Each

1,432.000

80

80

AN3C4A

Bolt

all 17/01/16

Location

Loc Qty

Loc Code

FG

20

122814

20

M1136245

✓ 80

FP001

862

M133440

7

M134396

41

M134509

6

M134606

29

M134676

44

M134762

106

M134861

13

M135058

123

M135127

22

M135297

52

M135442

2

M135774

123

M135864

294

OVER002

300

M135948

300

ST350

250

M135704

250

AN4C5A

Purchased

No

270

Each

66.0000

1

1

AN4C5A

Bolt

all 17/01/16

Location

Loc Qty

Loc Code

FP001

49

m133990

49

✓ 1

ST345

17

m134478

17

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Shop Packet Print

Page 8

Picklist Print

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Page 9

Work Order ID: 153877

153877

Parent Item: D206-642-541

D206-642-541

Parent Item Name: Repl.Skid.,High Gear,Std Wearplates Fits LH/RH, DART Tri-Bag Float Comp.

Start Date: 12/13/2016

Required Date: 12/23/2016

Start Qty: 1.00

Required Qty: 1.00

D2646

Manufactured No

270

Each

48.0000

1

1

D2646

Aft Cap

**

all 12/16/16

Location

Loc Qty

Loc Code

FG

4

85848

2

90495

2

FP001

44

127924

1

136885

3

141214

10

149748

30

X

D3413-1

Manufactured No

270

Each

40.0000

1

1

D3413-1

O-Ring

**

all 12/16/16

Location

Loc Qty

Loc Code

st530

40

136462

3

142835

7

145648

18

151731

12

X

Qty -041	Qty -043	Qty -045	Part Number	Description
X			D3274-041	SKIDTUBE ASSEMBLY
	X		D3274-043	SKIDTUBE ASSEMBLY
		X	D3274-045	SKIDTUBE ASSEMBLY (FOR PHI)
1	1	1	D2600-1-240	EXTRUSION
1	1	1	D2646	AFT CAP
12	12	12	D2649	CROSS BOLT SPACER
12	37	12	D3275-1	CROSS BOLT SPACER
1	1	1	D3282-041	FLOAT WEB
1	1	1	D3285-1	CAP
1	1	1	D3413-1	RING
1	1	1	D3415-041	NUT PLATE
9	9		D3537-1	WEARPAD
1	1		D3537-11	WEARPAD
1	1		D3537-3	WEARPAD
		9	D3537-9	WEARPAD
2	2	2	D3672-1	WASHER
1	1		D4956-15	WEARSHOE
1	1		D4956-23	WEARSHOE
1	1		D4956-35	WEARSHOE
1	1		D4956-39	WEARSHOE
78	78	40	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	42	AN3C4A	BOLT
1	1		AN4C5A	BOLT
1	1	1	NAS1149C0463R	WASHER (AN960C416)
80	80	42	NAS1149C0332R	WASHER (AN960C10L)
2	2	2	CCR264SS3-3	RIVET
2	2	2	CR3212-4-03	RIVET
		1	MS27039C4-05	SCREW

GENERAL NOTES:

1. MATERIAL: N/A

2. FINISH:

ON -041/-043: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D3282-041 WEB PRIME (REF. 4.2.1.3.3) OUTSIDE ONLY AND PAINT WHITE PER DART QSI 005 4.2 BLACK ANTI-SKID PAINT AS INDICATED TO 0.5" ABOVE LOCATION RIDGE PER DART QSI 005 4.4

ON -045: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D3282-041 WEB PRIME (REF. 4.2.1.3.3) INSIDE AND OUTSIDE PER QSI 005 4.2.1 PAINT BLACK PER QSI 005 4.2.2 USING CA8213/F37038 CAMOFLAGE BLACK PER MIL-PRF-05285E TYPE I CLASS H. BLACK ANTI-SKID PAINT AS INDICATED TO 0.5" ABOVE LOCATION RIDGE PER DART QSI 005 4.4

3. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

4. UNITS: INCHES UNLESS OTHERWISE NOTED

5. BREAK SHARP EDGES 0.005 TO 0.010 MAX

6. IDENTIFICATION: N/A

7. WEIGHT: FOR -041/-043 = 37.5 LBS

FOR -045 = 33.4 LBS

8. WELDING TO BE DONE PER DART QSI 004.

9. ALL HOLES DRILLED ON CENTERLINES.

10. DAMAGE TOLERANCE ON FWD BEND:

THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.

11. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX -241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.

12. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/291. ON -045, DO NOT DRILL HOLES OR INSTALL INSERTS FOR LONG WEARPLATES.

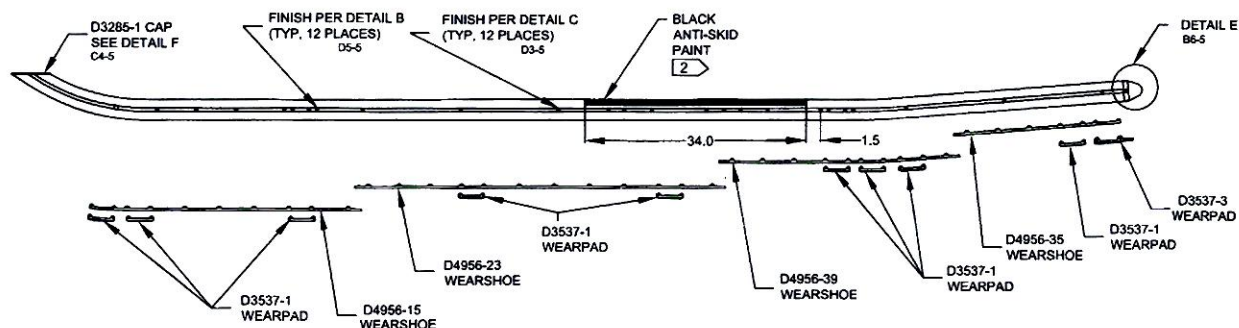
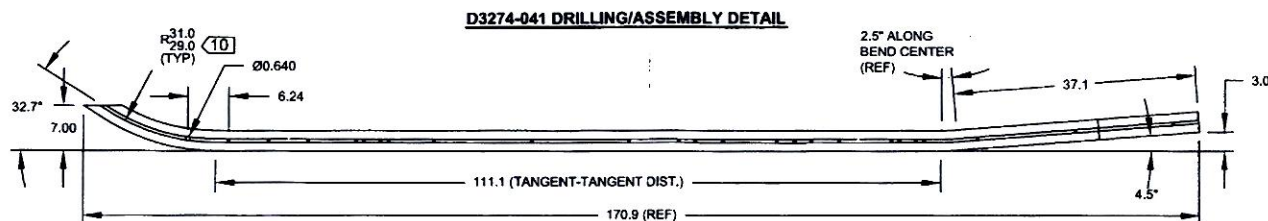
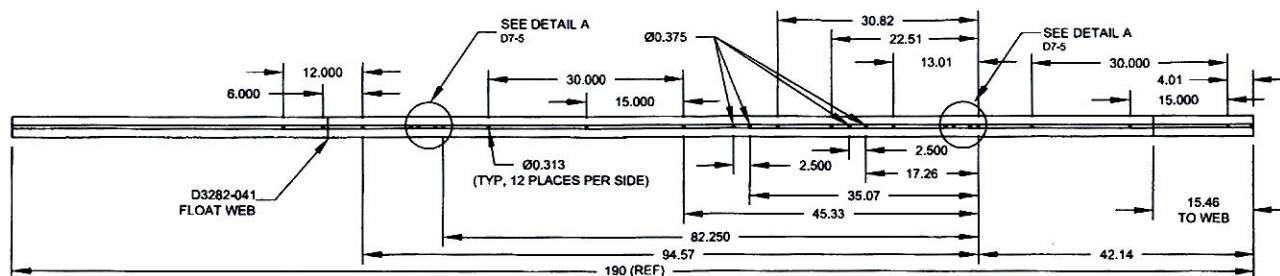
13. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS GREASE WITH WASH 'N WIPE DEGREASER.

14. ON -045, APPLY COAT OF ROCKGUARD TO SKIDTUBE WHERE WEARPADS ARE INSTALLED.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 153877 MJS
16-11-28

G	ADD -045 CONFIGURATION (FOR PHI) ZN A5-4, A5-6 REVISE NOTE 2, 7 & 12, ADD NOTE 14 (ZN A8-1)	DS	16.04.25
F	REVISE NOTE 2: ADD ANTI-SKID PAINT, REMOVE GASKETS PER IIN-D206-642 REV Q	DB	14.04.15
E	REVISE NOTE 2: FINISH NOW PRIME/PAINT WAS POWDERCOAT, REF. PAR13-256	DW	13.05.17
D	NEW INSERTS, SS WEARSHOE + GASKET	CP	06.12.19
C	ADD -043; NEW INSERTS	CP	05.03.16
B	MOVE SADDLE HOLE: 42.14 WAS 42.76	CP	04.08.09
A	NEW ISSUE	CP	04.03.15
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE USA, INC EUGENE, OR	
DRAWN	RF		
CHECKED	AK	DRAWING NO.	REV. G
MFG. APPR.	JLM	D3274	SHEET 1 OF 6
APPROVED	DS	TITLE	SCALE
DE APPR.		SKIDTUBE ASSEMBLY	NTS
DATE	16.04.25	COPYRIGHT © 2004 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

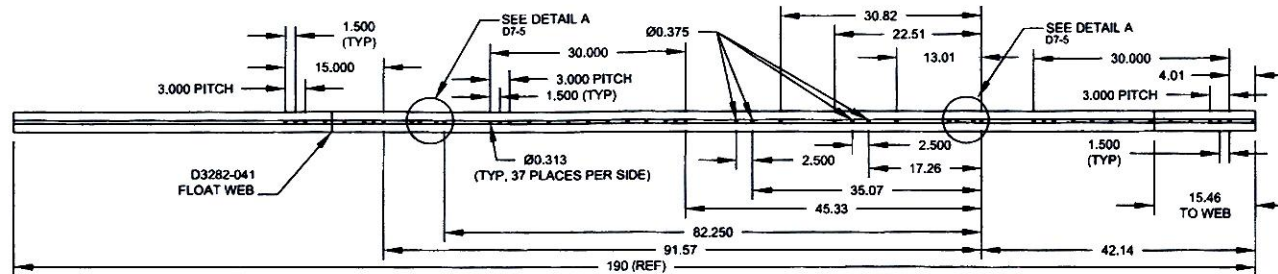
RELEASED
2016-07-26
ECN 16-616



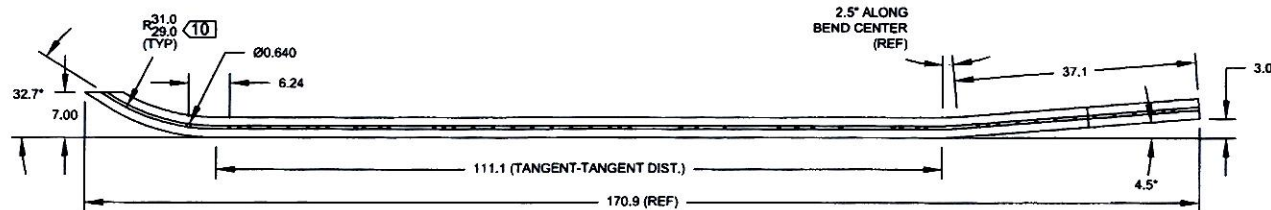
D3274-041 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED
2016-07-26

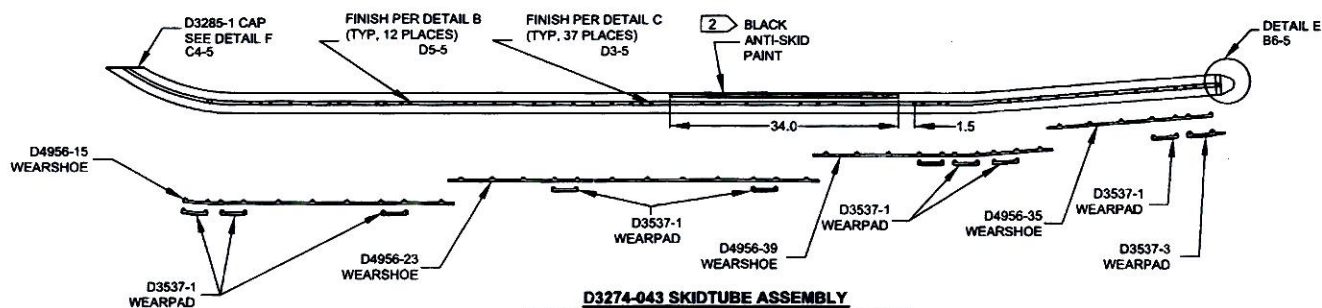
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CHECKED	AK	DRAWING NO.	REV. G
MFG. APPR.	JLM	D3274	SHEET 2 OF 6
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D3274-043 DRILLING/ASSEMBLY DETAIL



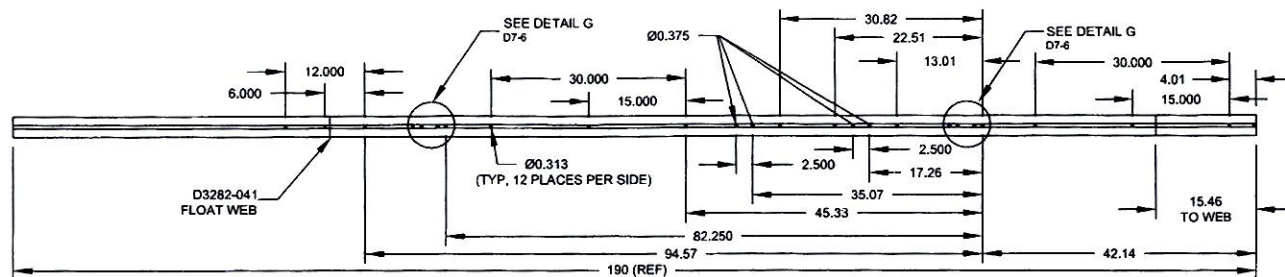
D3274-043 BEND/DRILLING DETAIL



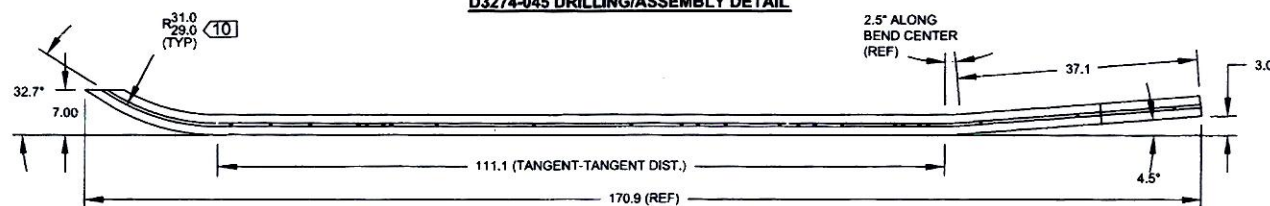
**D3274-043 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)**

RELEASE
2016-07-26

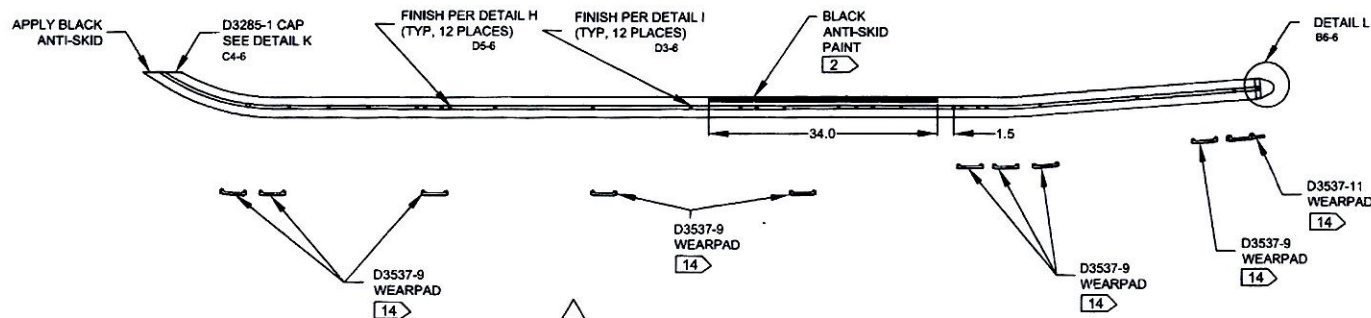
DESIGN	CP	DART AEROSPACE USA, INC	
DRAWN	RF	EUGENE, OR	
CHECKED	AK	DRAWING NO.	REV. G
MFG. APPR.	JLM	D3274	SHEET 3 OF 6
APPROVED	DS	TITLE	SCALE
DE APPR.	#	SKIDTUBE ASSEMBLY	NTS
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D3274-045 DRILLING/ASSEMBLY DETAIL



D3274-045 BEND/DRILLING DETAIL

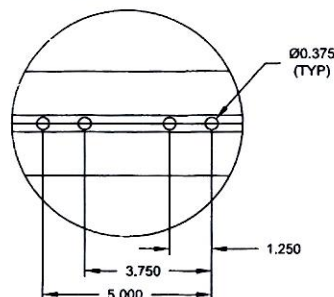


D3274-045 SKIDTUBE ASSEMBLY
(SEE DETAIL J FOR WEARSHOE INSTALLATION)

DESIGN	CP	DART AEROSPACE USA, INC	
DRAWN	RF	EUGENE, OR	
CHECKED	AK	DRAWING NO.	REV. G
MFG. APPR.	JLM	D3274	SHEET 4 OF 6
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DE APPR.		SKIDTUBE ASSEMBLY	NTS
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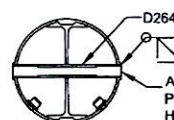
RELEASED
2016-07-26

DETAIL A: DRILL DETAIL
D6-2, D3-2, D5-3, D3-3



DETAIL B
B6-2, B5-3

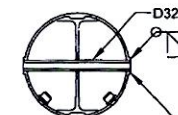
FOR Ø0.375 HOLES ONLY



- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE TO Ø0.313x0.75 DEEP

DETAIL C
B5-2, B4-3

FOR Ø0.313 HOLES ONLY



CHAMFER 0.030x45°
(TYP)

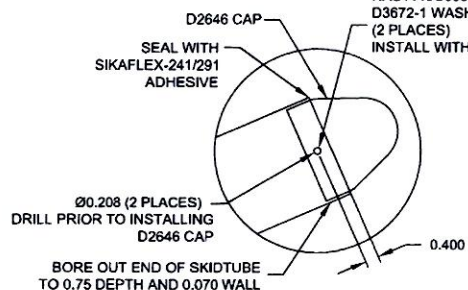
DETAIL D
A4-2, A4-3



- ALS7-1032-130 INSERT (1)
AN3C4A BOLT (1)
NAS1149C0332R WASHER (1)
(78 PLACES)

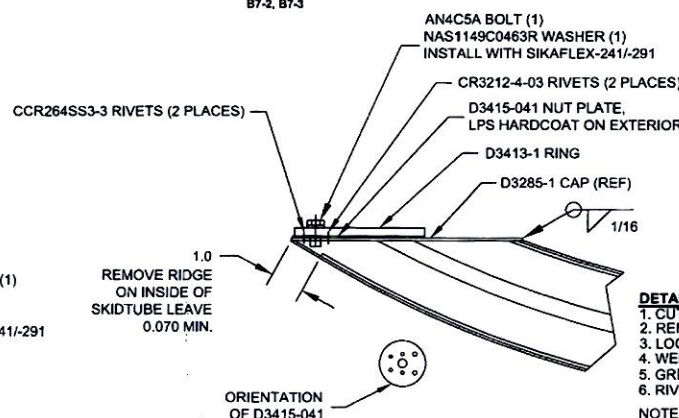
WEARSHOE/WEARPAD (REF)

DETAIL E
B2-2, B2-3



- AN3C4A BOLT (1)
NAS1149C0332R WASHER (1)
D3672-1 WASHER (1)
(2 PLACES)
INSTALL WITH SIKAFLEX-241/291

DETAIL F: END FINISHING DETAIL
B7-2, B7-3



DETAIL F NOTES

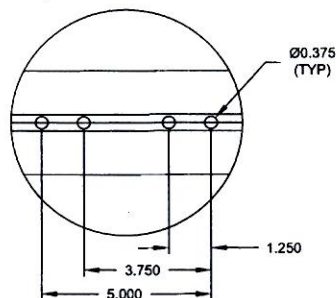
1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D3285-1 (TRIM AS NECESSARY)
 4. WELD D3285-1 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

-041/-043 DETAILS

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2016-07-26

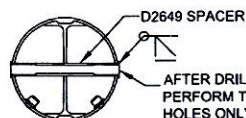
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CHECKED	AK	DRAWING NO.	REV. G
MFG. APPR.	JLM	D3274	SHEET 5 OF 6
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DETAIL G: DRILL DETAIL
D6-4, D3-4



DETAIL H
B6-4

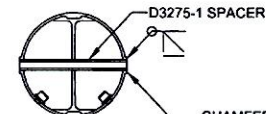
FOR Ø0.375 HOLES ONLY



- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE TO Ø0.313x0.75 DEEP

DETAIL I
B5-4

FOR Ø0.313 HOLES ONLY



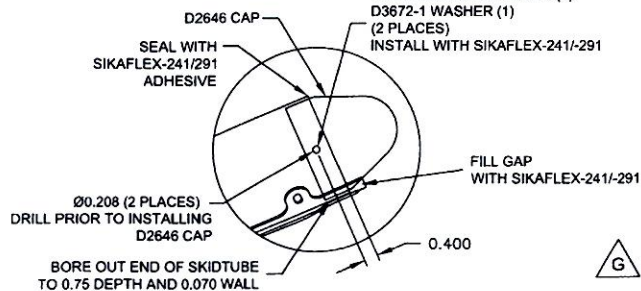
CHAMFER 0.030x45°
(TYP)

DETAIL J
A4-4

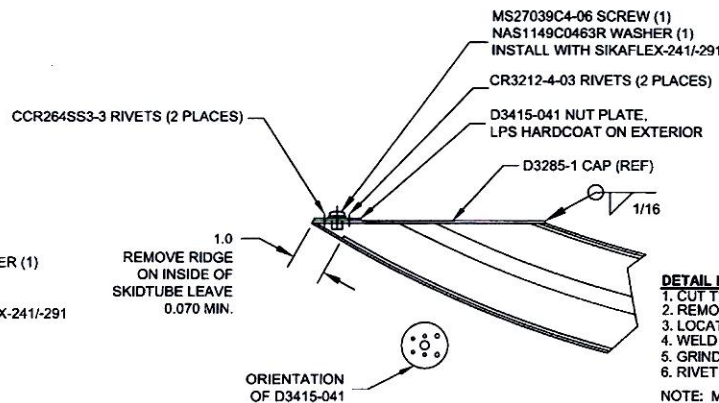


- ALS7-1032-130 INSERT (1)
AN3C4A BOLT (1)
NAS1149C0332R WASHER (1)
(40 PLACES)
WEARPAD (REF)

DETAIL L
B2-4



DETAIL K: END FINISHING DETAIL
B7-4



DETAIL K NOTES

1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D3285-1 (TRIM AS NECESSARY)
 4. WELD D3285-1 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

G -045 DETAILS

RELEASED
2016-07-26

DESIGN	CP	DART AEROSPACE USA, INC	
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CHECKED	AK	DRAWING NO.	REV. G
MFG. APPR.	JLM	D3274	SHEET 6 OF 6
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DE APPR.		SKIDTUBE ASSEMBLY	NTS
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